Fingerprinting

Put on your investigative hats and pull out your magnifying glasses! Explore the unique and unchanging fingerprint, an identification method that has been used for more than a century. Each of these activities meets a variety of state and national standards for technology and core subject areas.

Grades K-2

The ridges on fingerprints are grouped into eight distinct types of patterns. Show students the patterns and discuss them as a class. Then have each student look closely at his or her fingerprints using a magnifying glass. Have students use Graphics software to draw the pattern of ridges they see on their own fingers, then using the text tool to type the name of the pattern. As a class, discuss the results: Which type of pattern is most common in the class? Least common? How could this information be used?

EasyTech units: Beginning Graphics

Grades 3-5

Stage a “crime” and have students solve the mystery! First, use an ink pad to take each student’s fingerprints on an index card, and then write their name on the back of the card. The next day, remove a few obvious items from the classroom and tape one of the fingerprint cards (name side hidden) nearby each missing item. When students come into the room, instruct them to try to find what is missing and locate the nearby fingerprints. Have students use Database software to compile information about each student’s fingerprints (pattern type, size, etc.). Encourage students to examine each others’ fingerprint patterns closely, comparing them to the card at each scene in order to collect as much information as possible to make an identification. When students have all their data collected in the database, have them rule out suspects based on pattern type, etc. Once they think they have identified the owner of each set of prints, have them flip the card over to see if they are correct.

EasyTech units: Data and Database Basics; Database Creation, Queries and Reports

Aha!Science units: The Human Body

Grades 6-8

Have students perform the same investigation as listed above (for Grades 3-5) but with just a single “crime scene.” Then have students use Word Processing software to write a mock newspaper article about the crime and its resolution. The article should include background information about fingerprinting, which students should find on the Web, as well as details of the case and how it was solved.

EasyTech units: Web Browsing, Word Processing Software

Reference Sites

\* Fingerprinting: www.fingerprinting.com

\* Science News for Kids - Fingerprint Evidence: www.sciencenewsforkids.org/articles/20060503/Feature1.asp

\* Fingerprint Identification: www.fbi.gov/hq/cjisd/ident.pdf